

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the Matter of the

Application of: SVEHLA et al.

SERIAL NO.: 10/825,367

Filed: April 16, 2004

Entitled: **MANUAL INSERTION TOOL FOR A
COCHLEAR IMPLANT**

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Group Art Unit: 3731
Examiner: SONNETT, Kathleen.

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REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

In response to the Examiner's Answer mailed August 18, 2009, Appellants submit this
reply brief under 37 C.F.R. § 41.41.

TABLE OF CONTENTS

I. STATUS OF CLAIMS	3
II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	4
III. ARGUMENT.....	6
IV. CONCLUSION.....	33

I. STATUS OF CLAIMS

Claims 20-22, 25-37 and 73 are currently pending in the present application, Application Number 10/825,367. Claims 1-19, 23 and 24 were previously cancelled. Claims 38-72 and 74-76 were cancelled in an Amendment filed April 28, 2009. Claims 22-22, 25-37 and 73 have been finally rejected and, therefore, are subject to appeal.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent claims 21, 22, 25, 27, 35 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,738,366 to Blomberg, (hereinafter, "Blomberg") when Blomberg fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20-22, 25, 27, 35, 37 and 73.
- B. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent claims 21, 22, 25-27, 32 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,785,810 to Baccala et al., (hereinafter, "Baccala") when Baccala fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20-22, 25-27, 32, 37 and 73.
- C. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent claims 21, 22, 27, 28, 32, 33, 35 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,759,359 to Willis et al., (hereinafter, "Willis") when Willis fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20-22, 27, 28, 32, 33, 35, 37 and 73.
- D. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent claims 21, 22, 27, 29, 30, 32, 34 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,464,405 to Fujitsu et al., (hereinafter, "Fujitsu") when Fujitsu fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20-22, 27, 29, 30, 32, 34, 37 and 73.
- E. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent

claims 25, 27, 29, 31 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 1,653,803 to Fisher et al., (hereinafter, "Fisher") when Fisher fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20, 25, 27, 29, 31, 37 and 73.

F. Whether the Examiner improperly rejected independent claims 20 and 73 and dependent claims 27, 29, 30, 32, 34 and 37 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,887,110 to Roeschmann, (hereinafter, "Roeschmann") when Roeschmann fails to expressly or inherently disclose all elements of the claimed invention as recited in claims 20, 27, 29, 30, 32, 34, 37 and 73.

G. Whether the Examiner improperly rejected dependent claims 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over Willis when Willis fails to anticipate or render obvious all elements of the claimed invention.

H. Whether the Examiner improperly rejected dependent claim 36 under 35 U.S.C. §103(a) as being unpatentable over Willis in view of U.S. Patent No. 3,815,607 to Chester (hereinafter, "Chester") when the combination of Willis and Chester fails to anticipate or render obvious all elements of the claimed invention.

III. ARGUMENT

Claim Rejections under 35 U.S.C. §102 in view of Blomberg

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20 and 73; emphasis added.)

Appellants argued in the Appeal Brief filed May 11, 2009, (hereinafter, "Appellants Appeal Brief"), that Blomberg fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Blomberg discloses parallel opposing members 2 and 3 each have a U-shaped cross-section which are affixed to one another at end 4. (See, Blomberg, FIGS. 1-2; col. 3, lns. 4-53.) Appellants further submitted that members 2 and 3 are generally parallel to one another and are substantially positioned within a single plane (excluding instrument thickness). (See, Blomberg, FIGS. 1-2; col. 2, ln. 60- col. 3, ln. 53.) Within this single plane, each member extends outwardly from end 4 to an intermediate point where the members each bend back toward one another. In the Examiner's Answer, the Examiner appears to agree with this interpretation of Blomberg, but asserts that "this feature [i.e. that opposing members 2 and 3 of Blomberg are affixed to one another and extend way from the end within a single plane] does not prevent an electrode [assembly] from being received in the claimed manner." (See,

Examiner's Answer, pg. 13.) The Examiner asserts that a user could insert an electrode array "into tip region (20) [of Blomberg] and push it along the longitudinal axis of the concave-shaped region until it is received in the proximal end of this region." (See, Examiner's Answer, pg. 13.) In other words, the Examiner contends that because the device of Blomberg has an open distal end, it would be possible to insert an electrode assembly into this open distal end, and push or advance the electrode assembly away from the distal end, until the assembly is received in the proximal end, thereby satisfying the above claim limitations. (See, Examiner's Answer, pgs. 13.)

Appellants respectfully remind the Examiner that, as recited in the Manual of Patent Examining Procedure (MPEP), "[t]he Patent and Trademark Office ('PTO') determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) (citing *In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827 (Fed. Cir. 2004)) (emphasis added). "Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation'." *In re Marosi*, 710 F.2d 799, 218 USPQ 289, 292 (Fed. Cir. 1983) (quoting *In re Okuzawa*, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976)) (emphasis in original). As detailed below, Appellants respectfully submit that the Examiner's interpretation of the above claim limitation is unreasonably broad and inconsistent with Appellants' specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted, Appellants' claim 20 is directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claim 20.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20; emphasis added.)

As explained in Appellants' specification, an "electrode assembly" for a stimulating medical device is an elongate device held in a straight configuration during insertion. (See, Appellants' specification, paras. 36-40.) Appellants' specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate electrode assembly relative to the device is beneficial. (See, Appellants' specification, paras. 36-40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to "grasp, hold, retain and release" an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants' specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants' claim 20 discloses a forceps tool having a proximal end of a first region "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region," and which permits "relative longitudinal movement of said electrode assembly with respect to the forceps tool." (See, Appellants' claim 20.) In order to enable the claimed

receiving and relative movement along the “longitudinal axis” is important that no region of the tool obstructs any portion of the “longitudinal axis.” (See, Appellants’ specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See, Appellants’ specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants’ specification, one of ordinary skill in the art would interpret the “proximal end of said concave-shaped cross-sectional region” being “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the “proximal end” and “relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted.” (See, Appellants’ claim 20.)

As noted, opposing members 2 and 3 of Blomberg are affixed to one another at end 4, and extend away from the end within a single plane. (See, Blomberg, FIGS. 1-2; col. 2, ln. 60-col. 3, ln. 15.) Because members 2 and 3 are positioned within this single plane, the longitudinal axis through each alleged U-shaped region of Blomberg must extend through one of the members. In other words, in the forceps of Blomberg, the axis through the center of the U-shaped ends is physically obstructed by the members. In view of the above interpretation of the claims, Appellants assert that this physical obstruction of the longitudinal axis makes it impossible for the proximal ends of the U-shaped regions of Blomberg to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said

concave-shaped cross-sectional region" as recited, in part, in Appellants' claim 20. Therefore, for at least this reason, Appellants assert that Blomberg fails to expressly or inherently disclose all elements of Appellants' claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Blomberg be reversed.

As noted, in the Examiner's Answer, the Examiner asserts that Blomberg meets the claim limitation of "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" because it would be possible to insert an electrode assembly into this open distal end, and push or advance the electrode assembly away from distal end, until the assembly is received in the proximal end. (*See*, Examiner's Answer, pgs. 13.) The Examiner also asserts that "[a]lternatively, if the forces arms are opened, an electrode [assembly] may be inserted in a direction orthogonal to the longitudinal axis so that the electrode [assembly] is received in the proximal end of the concave region along the axis." (*See*, Examiner's Answer, pgs. 13.) The Examiner continues by stating that, "[i]n other words, the claim does not necessitate that the electrode [assembly] is inserted along the claimed axis. Rather, it must be received along the axis." (*See*, Examiner's Answer, pgs. 13.)

Appellants disagree with these assertions by the Examiner and fail to see how an electrode assembly may be inserted into the concave region differently than how it is received by the concave region. Rather, as understood by one of ordinary skill in the art, the inserting a first element into a second element, is exactly the same as the second element receiving the first element. The only difference is the act being performed by each element. For example, if an electrode assembly is inserted into a concave region at an angle, the concave region receives the

electrode assembly at angle. Similarly, if the electrode assembly is received “along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region inserted into the concave region,” the electrode assembly must be inserted along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region inserted into the concave region.”

Appellants submit that an electrode assembly inserted “orthogonal [perpendicular] to the longitudinal axis,” cannot be received “along the longitudinal axis” as recited, in part, in claim 20. Rather, an electrode assembly inserted orthogonally would be received, orthogonally to the axis. As would be appreciated by one of ordinary skill in the art, received an electrode assembly orthogonally to an axis, is not inserted “along” the axis. To assert otherwise is contrary to the customary and ordinary meaning of the term “along.” Therefore, for at least this reason, Appellants assert that Blomberg fails to disclose “a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as recited, in part, in Appellants claim 20.

Claim 73

As noted, Appellants’ claim 73 is directed to a “forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said

concave-shaped cross-sectional region." (See, Appellants' claim 73; emphasis added.) For at least the same reason as discussed above with reference to claim 20, Appellants assert that Blomberg fails to expressly or inherently disclose at least these elements of Appellants' claim 73. Specifically, as noted above, the longitudinal axis through the U-shaped forceps members are physically obstructed by the members, thereby making it impossible for the proximal ends of said U-shaped region to be "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." Therefore, Appellants contend that claim 73 is patentable over Blomberg and Appellants respectfully request that the rejection of claim 73 as anticipated by Blomberg be reversed.

Claim Rejections under 35 U.S.C. §102 in view of Baccala

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20 and 73; emphasis added.)

In Appellants' Appeal Brief, Appellants argued that Baccala fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Baccala comprises two actuation arms which terminate in a pair of jaws. (See, Baccala, col. 3, lines 23-47.) The

“first actuation arm is connected to the first elongate jaw” 16 that comprises a U-shaped trough. (See, Baccala, col. 5, lns. 30-42; FIG. 2, reproduced above.) The “second actuation arm is provided and connected to the second elongate jaw” 18 which consists of a rod. (See, Baccala, col. 5, lns. 30-42; FIG. 2.) As can be seen in FIG. 2, each arm is connected to its respective jaw 16, 18 at an angle such that the arm/jaws form a general L-shape. (See, Baccala, col. 5, lns. 30-42; FIG. 2.)

In the Examiner's Answer, the Examiner appears to agree with this interpretation of Baccala, but asserts that an “electrode [assembly] can be received into the proximal end of the concave section along the longitudinal axis of the concave portion by inserting the electrode [assembly] into the distal end of the concave region and pushing it proximally (toward the handles) until the electrode is received in the proximal end of the concave region.” (See, Examiner's Answer, pg. 14.) As detailed below, Appellants respectfully submit that the Examiner is interpreting the claims in an unreasonably broad manner with is inconsistent with Appellants' specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted above, Appellants' claim 20 is directed to a “forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region.” (See, Appellants' claim 20.) The first flexible arm includes “a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric

center of said concave-shaped cross-sectional region.” (See, Appellants’ claim 20; emphasis added.)

As explained in Appellants’ specification, an “electrode assembly” for a stimulating medical device is an elongate device held in a straight configuration during insertion. (See, Appellants’ specification, paras. 36-40.) Appellants’ specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate electrode assembly relative to the device is beneficial. (See, Appellants’ specification, paras. 36-40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to “grasp, hold, retain and release” an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants’ specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants’ claim 20 discloses a forceps tool having a proximal end of a first region “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region,” and which permits “relative longitudinal movement of said electrode assembly with respect to the forceps tool.” (See, Appellants’ claim 20.) In order to enable the claimed receiving and relative movement along the “longitudinal axis” is important that no region of the tool obstructs any portion of the “longitudinal axis.” (See, Appellants’ specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See, Appellants’ specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants' specification, one of ordinary skill in the art would interpret the "proximal end of said concave-shaped cross-sectional region" being "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the "proximal end" and "relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted." (*See*, Appellants' claim 20.)

As noted, each arm of Baccala is connected to a jaw so that each arm/jaw collectively form a general L-shape. (*See*, Baccala, col. 5, lns. 30-42; FIGS. 1-2.) Due to this L-shape, the longitudinal axis through the U-shaped trough of the first elongate jaw must extend through one of the arms. In other words, the L-shape results in the physical obstruction of the longitudinal axis through the center of the U-shaped trough. In view of the above interpretation of the claims, Appellants assert that this physical obstruction of the longitudinal axis makes it impossible for the proximal ends of the U-shaped trough of Baccala to be "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" as recited, in part, in Appellants' claim 20. Therefore, for at least this reason, Appellants assert that Baccala fails to expressly or inherently disclose all elements of Appellants' claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Baccala be reversed.

Claim 73

Appellants' claim 73 is directed to a "forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 73; emphasis added.) For at least the same reason as discussed above with reference to claim 20, Appellants assert that Baccala fails to expressly or inherently disclose at least these elements of Appellants' claim 73. Specifically, as described above, the longitudinal axis through the U-shaped trough of Baccala is physically obstructed making it impossible for the proximal end of the U-shaped portion to be "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." Therefore, Appellants contend that claim 73 is patentable over Baccala and Appellants respectfully request that the rejection of claim 73 as anticipated by Baccala be reversed.

Claim Rejections under 35 U.S.C. §102 in view of Willis

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a

longitudinal axis through the geometric center of said concave-shaped cross-sectional region.”
(*See*, Appellants’ claim 20 and 73; emphasis added.)

In Appellants’ Appeal Brief, Appellants argued that Willis fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Willis is directed to a “lens implantation instrument [which] includes first and second prongs connected together in a forceps-like configuration.” (*See*, Willis, Abstract; col. 2, lns. 3-28; FIG. 3, reproduced below.) The first prong is an elongate member 12 which comprises a handle 16, a distal portion that “defines a concave channel or trough 14,” and an intermediate portion 17 connecting the trough to the handle. (*See*, Willis, col. 3, lns. 19-59; FIGS. 3-6.) The second prong includes a handle connected to an elongate element 19 terminating in “a distal end portion [28] that extends generally parallel to the trough... [and] has a size and shape adapted to fit at least partially into the trough.” (*See*, Willis, col. 2, lns. 3-28; FIG. 3.)

In the Examiner’s Answer, the Examiner appears to agree with this interpretation of Willis, but asserts that an “electrode [assembly] may be inserted into the open distal end of the concave region... and advanced proximally along the longitudinal axis of the concave region until it is received within the proximal end of the concave region.” (*See*, Examiner’s Answer, pg. 14.) As detailed below, Appellants respectfully submit that the Examiner is interpreting the claims in an unreasonably broad manner with is inconsistent with Appellants’ specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted above, Appellants’ claim 20 is directed to a “forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of

said first region is connected to the proximal end of said second region.” (See, Appellants’ claim 20.) The first flexible arm includes “a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region.” (See, Appellants’ claim 20; emphasis added.)

As explained in Appellants’ specification, an “electrode assembly” for a stimulating medical device is an elongate device held in a straight configuration during insertion. (See, Appellants’ specification, paras. 36-40.) Appellants’ specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate electrode assembly relative to the device is beneficial. (See, Appellants’ specification, paras. 36-40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to “grasp, hold, retain and release” an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants’ specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants’ claim 20 discloses a forceps tool having a proximal end of a first region “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region,” and which permits “relative longitudinal movement of said electrode assembly with respect to the forceps tool.” (See, Appellants’ claim 20.) In order to enable the claimed receiving and relative movement along the “longitudinal axis” is important that no region of the tool obstructs any portion of the “longitudinal axis.” (See, Appellants’ specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See,

Appellants' specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants' specification, one of ordinary skill in the art would interpret the "proximal end of said concave-shaped cross-sectional region" being "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the "proximal end" and "relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted." (See, Appellants' claim 20.)

As noted, intermediate portion 17 of the first prong of Willis extends from trough 14 to handle 16. (See, Willis, col. 3, lns. 19-59.) As can be seen in FIGS. 1-3, the longitudinal axis through trough 14 must extend through intermediate portion 17. In other words, the longitudinal axis through the center of trough 14 is physically obstructed near its proximal end by intermediate portion 17. This physical obstruction makes it impossible for the proximal end of trough 14 to be "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" as recited, in part, in Appellants' claim 20. Therefore, for at least this reason, Appellants assert that Willis fails to expressly or inherently disclose all elements of Appellants' claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Willis be reversed.

Claim 73

Appellants' claim 73 is directed to a "forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 73; emphasis added.) For at least the same reason as discussed above with reference to claim 20, Appellants assert that Willis fails to expressly or inherently disclose at least these elements of Appellants' claim 73. Specifically, as described above, the longitudinal axis through the trough of Willis is physically obstructed making it impossible to be "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region"" as recited, in part, in Appellants' claim 73. Therefore, Appellants assert that claim 73 is patentable over Willis and Appellants respectfully request that the rejection of claim 73 as anticipated by Willis be reversed.

Claim Rejections under 35 U.S.C. §102 in view of Fisher

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a

longitudinal axis through the geometric center of said concave-shaped cross-sectional region.”
(*See*, Appellants’ claim 20 and 73; emphasis added.)

In Appellants’ Appeal Brief, Appellants argued that Fisher fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Fisher is directed to a pair of laboratory tongs designed to hold the handles of laboratory dishes, commonly referred to as casseroles. (*See*, Fisher, pg. 1, lns. 1-13.) The tongs “comprise two handle members [6 and 7] joined by a rivet” 8. (*See*, Fisher, pg. 1, lns. 51-52; FIG. 1, reproduced below.) The distal end of handle 7 comprises a “flat broadened terminal portion 11, which is adapted to seat upon and engage the upper flattened face 3 of the handle of a casserole.” (*See*, Fisher, pg. 1, lns. 75-79; FIG. 1.) The distal end 12 of the handle 6 terminates in an elongate plate member. (*See*, Fisher, pg. 1, lns. 80-90; FIG. 1.) A cylindrical member 13 surrounds the elongate plate member and is secured thereto by rivets. (*See*, Fisher, pg. 1, lns. 80-90; FIG. 1.) Two wings 14 and 15 extend from this cylindrical member towards the “flat broadened terminal portion” of the other handle. (*See*, Fisher, pg. 1, lns. 80-90; FIG. 1.) Each of these wing members has a inwardly extending terminal flange 16 at its end. (*See*, Fisher, pg. 1, lns. 80-90; FIG. 1.) Both handles are positioned in a single plane (excluding handle thickness) “that passes between the flat faces connected by the rivet. (*See*, Fisher, pg. 1, lns. 70-75; FIG. 1.)

In the Examiner’s Answer, the Examiner appears to agree with this interpretation of Fisher, but asserts that an “electrode [assembly] may be inserted into the open distal end of the concave region... and advanced proximally along the longitudinal axis of the concave region until it is received within the proximal end of the concave region.” (*See*, Examiner’s Answer, pg. 14.) As detailed below, Appellants respectfully submit that the Examiner is interpreting the

claims in an unreasonably broad manner with is inconsistent with Appellants' specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted above, Appellants' claim 20 is directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claim 20.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20; emphasis added.)

As explained in Appellants' specification, an "electrode assembly" for a stimulating medical device is an elongate device held in a straight configuration during insertion. (See, Appellants' specification, paras. 36-40.) Appellants' specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate electrode assembly relative to the device is beneficial. (See, Appellants' specification, paras. 36-40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to "grasp, hold, retain and release" an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants' specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants' claim 20 discloses a forceps tool having a proximal end of a first region "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-

sectional region,” and which permits “relative longitudinal movement of said electrode assembly with respect to the forceps tool.” (See, Appellants’ claim 20.) In order to enable the claimed receiving and relative movement along the “longitudinal axis” is important that no region of the tool obstructs any portion of the “longitudinal axis.” (See, Appellants’ specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See, Appellants’ specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants’ specification, one of ordinary skill in the art would interpret the “proximal end of said concave-shaped cross-sectional region” being “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the “proximal end” and “relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted.” (See, Appellants’ claim 20.)

As noted, the handle members of Fisher are affixed to one another via a central rivet, and are both positioned substantially in a single plane. (See, Fisher, pg. 1, lns. 70-75.) Due to the fact that the handles of Fisher are entirely positioned in this single plane, the longitudinal axis through the trough-like portion would extend through one of the handles. In other words, the longitudinal axis is physically obstructed at all times by one of the handles. Due to this physical obstruction, it would be impossible for the tongs of Fisher to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-

shaped cross-sectional region” as recited, in part, in Appellants’ claim 20. Therefore, for at least this reason, Appellants assert that Fisher fails to expressly or inherently disclose all elements of Appellants’ claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Fisher be reversed.

Claim 73

Appellants’ claim 73 is directed to a “forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region.” (See, Appellants’ claim 73; emphasis added.) For at least the same reasons as discussed above with reference to claim 20, Appellants assert that Fisher fails to expressly or inherently disclose at least these elements of Appellants’ claim 73. Specifically, as noted above, the longitudinal axis through the alleged concave region of Fisher is physically obstructed making it impossible to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as recited, in part, in Appellants’ claim 73. Therefore, Appellants assert that claim 73 is patentable over Fisher and Appellants respectfully request that the rejection of claim 73 as anticipated by Fisher be reversed.

Claim Rejections under 35 U.S.C. §102 in view of Roeschmann

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20 and 73; emphasis added.)

In Appellants' Appeal Brief, Appellants argued that Roeschmann fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Roeschmann is directed to forceps for removing surgical clips or clamps. (See, Roeschmann, col. 1, lns. 14-23.) The forceps comprise "a pair of outwardly bowed arms" 12 and 13 pivotally connected together at one end. (See, Roeschmann, col. 1, lns. 50-67; FIG. 1, reproduced to the left.) The other ends of arms 12 and 13 comprise a pair of parallel fingers 21 and 22, respectively. (See, Roeschmann, col. 1, ln. 67- col. 2, ln. 10; FIG. 1.) As shown in FIG. 1, each finger has a longitudinal groove 23, 24 that extends partially along the face thereof. (See, Roeschmann, FIG. 1; col. 1, ln. 67- col. 2, ln. 10.) Furthermore, as shown in FIG. 2, arms 12 and 13 are positioned parallel in a single plane (not including instrument thickness) such that as the arms are squeezed together, fingers 21 and 22 are also brought together and a portion of a surgical clip is received in each of the grooves 23, 24. (See, Roeschmann, col. 2, lns. 11-34; FIG. 2, reproduced to the left.) Fingers 21 and 22 then firmly grip the surgical clip so that it may be removed from a patient. (See, Roeschmann, col. 2, lns. 11-34.)

In the Examiner's Answer, the Examiner appears to agree with this interpretation of Roeschmann, but asserts that an "electrode [assembly] can be inserted into the open distal end of the concave region (portion 23 shown in figured 1 and 4) and advanced proximally along the longitudinal axis through the geometric center of the concave portion until it is received in the proximal end of the this region (23)." (See, Examiner's Answer, pgs. 14-15.) As detailed below, Appellants respectfully submit that the Examiner is interpreting the claims in an unreasonably broad manner with is inconsistent with Appellants' specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted above, Appellants' claim 20 is directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claim 20.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20; emphasis added.)

As explained in Appellants' specification, an "electrode assembly" for a stimulating medical device is an elongate device held in a straight configuration during insertion. (See, Appellants' specification, paras. 36-40.) Appellants' specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate electrode assembly relative to the device is beneficial. (See, Appellants' specification, paras. 36-

40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to “grasp, hold, retain and release” an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants’ specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants’ claim 20 discloses a forceps tool having a proximal end of a first region “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region,” and which permits “relative longitudinal movement of said electrode assembly with respect to the forceps tool.” (See, Appellants’ claim 20.) In order to enable the claimed receiving and relative movement along the “longitudinal axis” is important that no region of the tool obstructs any portion of the “longitudinal axis.” (See, Appellants’ specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See, Appellants’ specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants’ specification, one of ordinary skill in the art would interpret the “proximal end of said concave-shaped cross-sectional region” being “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the “proximal end” and “relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted.” (See, Appellants’ claim 20.)

As noted, the arms of Roeschmann are connected to one another via a pivot, and are both positioned in a single plane. (*See*, Roeschmann, col. 1, lns. 50-67.) Due to the fact that the arms of Roeschmann are entirely positioned in this single plane, the longitudinal axis through the longitudinal grooves would extend through at least one of the arms. In other words, the longitudinal axis is physically obstructed making it impossible for the proximal end of the grooves of Roeschmann to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as recited, in part, in Appellants’ claim 20. Therefore, for at least this reason, Appellants assert that Roeschmann fails to expressly or inherently disclose all elements of Appellants’ claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Roeschmann be reversed.

Claim 73

Appellants’ claim 73 is directed to a “forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region.” (*See*, Appellants’ claim 73; emphasis added.) For at least the same reason as discussed above with reference to claim 20, Appellants assert that Roeschmann fails to expressly or inherently disclose at least these elements of Appellants’ claim 73. Specifically, as noted above, the longitudinal axis through the alleged concave region of Roeschmann is physically obstructed making it impossible to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as

recited, in part, in Appellants' claim 73. Therefore, Appellants assert that claim 73 is patentable over Roeschmann and Appellants respectfully request that the rejection of claim 73 as anticipated by Roeschmann be reversed.

Claim Rejections under 35 U.S.C. §102 in view of Fujitsu

Appellants' independent claims 20 and 73 are each directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (See, Appellants' claims 20 and 73.) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (See, Appellants' claim 20 and 73; emphasis added.)

In Appellants' Appeal Brief, Appellants argued that Fujitsu fails to expressly or inherently disclose the above limitations. Specifically, Appellants argued that Fujitsu is directed to a pair of "bipolar electric coagulating and incising tweezers." (See, Fujitsu, col. 1, lns. 51-55.) The tweezers comprise first and second arms 2 and 3 each having a tip portion 8 and a grip portion 4. (See, Fujitsu, col. 1, lns. 40-49; FIG. 1.) Grip portions 4 are connected together at their proximal end, and tip portions 8 are configured to be closed together to incise a tissue. (See, Fujitsu, FIG. 1, col. 2, ln. 40- col. 3, ln. 15.) Tip portions 8 are each connected to electrodes to assist in coagulation following incising of tissue. (See, Fujitsu, col. 1, lns. 9-27.) The tweezers of Fujitsu have the added feature that a perfusion passage pipe 10 is embedded in a groove 9 in the surface of one of the arms. (See, Fujitsu, col. 2, ln. 40- col. 3, ln. 15; FIG. 3,

reproduced above.) Perfusion passage pipe 10 permits the flow of a saline or other liquid there through during the incising procedure. (*See, Fujitsu, col. 1, lns. 9-27.*)

In the Examiner's Answer, the Examiner appears to agree with this interpretation of Fujitsu, but asserts that an "electrode [assembly] can be inserted into the open distal end of tube (10) which lies within concave region (9) and advanced proximally along the longitudinal axis of the concave portion until it is received within the proximal end of this region." (*See, Examiner's Answer, pg. 15.*) As detailed below, Appellants respectfully submit that the Examiner is interpreting the claims in an unreasonably broad manner with is inconsistent with Appellants' specification that the understanding of one of ordinary skill in the art.

Claim 20

As noted above, Appellants' claim 20 is directed to a "forceps tool... comprising: a first flexible arm comprising contiguous first and second elongate regions, wherein the distal end of said first region is connected to the proximal end of said second region." (*See, Appellants' claim 20.*) The first flexible arm includes "a length of said second region comprising a concave cross-sectional shaped region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region." (*See, Appellants' claim 20; emphasis added.*)

As explained in Appellants' specification, an "electrode assembly" for a stimulating medical device is an elongate device held in a straight configuration during insertion. (*See, Appellants' specification, paras. 36-40.*) Appellants' specification makes it clear that to insert such an electrode assembly, a tool designed so as not to interfere with movement of the elongate

electrode assembly relative to the device is beneficial. (See, Appellants' specification, paras. 36-40.) This ability to move the electrode assembly relative to the forceps allows a surgeon to "grasp, hold, retain and release" an electrode assembly without reducing maneuverability and/or visibility. (See, Appellants' specification, pg. 40.)

To enable such insertion of an electrode assembly, Appellants' claim 20 discloses a forceps tool having a proximal end of a first region "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region," and which permits "relative longitudinal movement of said electrode assembly with respect to the forceps tool." (See, Appellants' claim 20.) In order to enable the claimed receiving and relative movement along the "longitudinal axis" is important that no region of the tool obstructs any portion of the "longitudinal axis." (See, Appellants' specification, paras. 40-44.) If any region of the tool obstructs the axis, the ability to receive the electrode assembly as well as the ability to move the electrode assembly along the axis would be limited. (See, Appellants' specification, paras. 40-44.) Such interference would defeat the above noted benefits provided by an electrode assembly tool.

In view of Appellants' specification, one of ordinary skill in the art would interpret the "proximal end of said concave-shaped cross-sectional region" being "configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region" as a device in which the longitudinal axis through the concave region is not physically obstructed, in any direction, by any other region of the tool. Because the axis is not physically obstructed, the electrode assembly may be received in the "proximal end" and "relative longitudinal movement of said electrode assembly with respect to the forceps tool is permitted." (See, Appellants' claim 20.)

As shown in FIG. 2 of Fujitsu, perfusion passage pipe 10 extends along a portion of arm 2 and terminates at a “perfusio[n] connection port 11 within a housing” where it connected to a “perfusing device.” (See, Fujitsu, col. 2, lns. 50-66; FIG. 2.) Due to the fact that the proximal end of the structure that the Examiner contends is able to support an electrode assembly is physically blocked by a “perfusing device,” Appellants assert that it is impossible for the proximal end of perfusion passage pipe 10 to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as recited, in part, in Appellants’ claim 20. Therefore, for at least this reason, Appellants assert that Fujitsu fails to expressly or inherently disclose all elements of Appellants’ claim 20. As such, Appellants respectfully request that the rejection of claim 20 as anticipated by Fujitsu be reversed.

Claim 73

Appellants’ claim 73 is directed to a “forceps tool... comprising: a first elongate arm having a longitudinal axis and proximal and distal ends and a structure proximate said distal end that forms at least a portion of a surface of a concave-shaped cross-sectional region, wherein the proximal end of said concave-shaped cross-sectional region is configured to receive the electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region.” (See, Appellants’ claim 73; emphasis added.) For at least the same reasons as discussed above with reference to claim 20, Appellants assert that Fujitsu fails to expressly or inherently disclose at least these elements of Appellants’ claim 73. Specifically, as noted above, the proximal end of the perfusion passage is physically blocked by a “perfusing device” making it impossible to be “configured to receive said electrode assembly along a longitudinal axis through the geometric center of said concave-shaped cross-sectional region” as recited, in part,

in Appellants' claim 73. Therefore, Appellants assert that claim 73 is patentable over Fujitsu and Appellants respectfully request that the rejection of claim 73 as anticipated by Fujitsu be reversed.

IV. CONCLUSION

For the reasons noted above, Appellants submit that the pending claims define patentable subject matter. Accordingly, Appellants request that the Examiner's rejections of these claims be reversed and that the pending application be passed to issue.

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Respectfully submitted,

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